

Weekly Report

Done

- Paper readding
- Start VIS2019 coding for testing. I found Dyngraph2vec can embedding the dynamic graph(arxiv 2018.9) with great accuracy rate in real datasets. I think we could support different type graph in the big graph system, and match with different embedding algorithms to complete lots of types projects.
- Prepare the presentation of VIS
- Coding of dynamic graph (赵晓东)
- Tests of Dyngraph2vec (龚友诚)

To Do

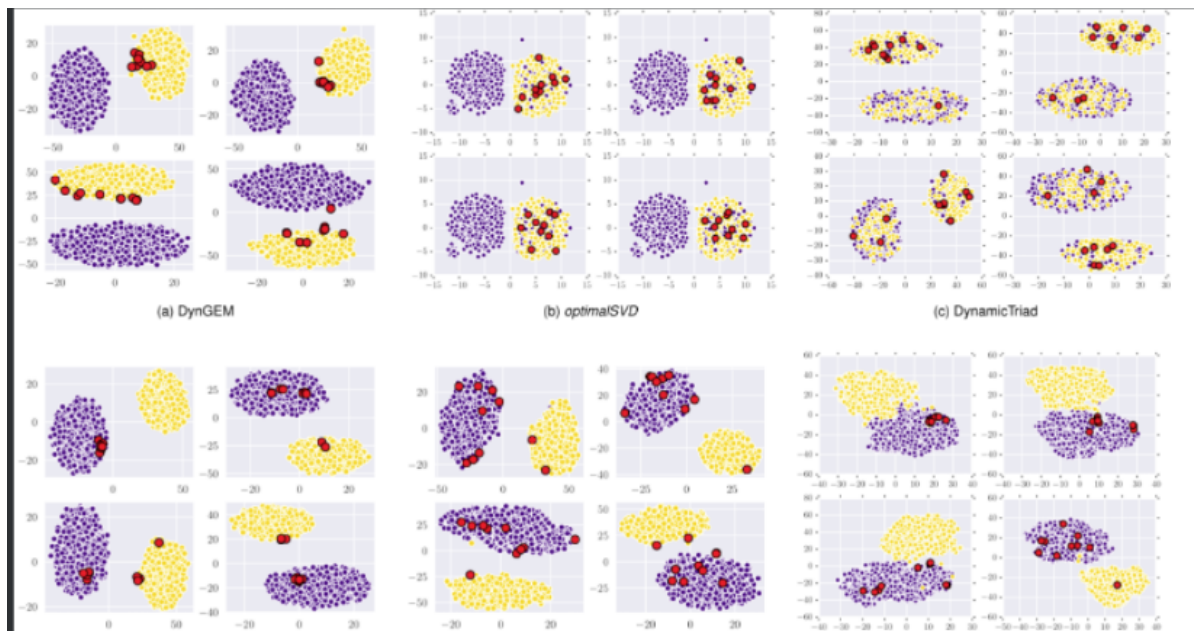
- Prepare the presentation of VIS
- Compare embedding algorithms and achieve a initial backend
- Achieve a initial frontend to support the dynamic graph

Working hours

Date	Moring	Afternoon	Night
Monday	9:00-11:30	12:30-5:00	6:00-9:00
Tuesday	9:00-11:30	12:30-5:00	6:00-9:00
Wednesday	9:00-11:30	12:30-5:00	6:00-11:00
Thursday	9:00-11:30	12:30-5:00	6:00-10:00
Friday	9:00-11:30	12:30-5:00	
Saturday			
Sunday			6:30-9:00

Paper Reading

1. dyngraph2vec: Capturing Network Dynamics using Dynamic Graph Representation Learning



- 动态图的Embedding，这里面一直说的是link prediction。实体在社团间移动，意味着实体的边在一个社团增加，一个社团减少。这个图是每个运行4次，看那些改变的实体有没有被捕捉到
 - 后面的各种测试中**dyngraph2vecAERNN**效果最好
2. [A Comprehensive Survey of Graph Embedding: Problems, Techniques and Applications](#)
 3. [subgraph2vec: Learning Distributed Representations of Rooted Sub-graphs from Large Graph](#)
 4. Visualizing Dataflow Graphs of Deep Learning Models in TensorFlow
 5. EmbeddingVis: A Visual Analytics Approach to Comparative Network Embedding Inspection
 - Maybe we can visualize different graphs by graph embedding algorithms and adjustment parameters of them. We can also design a visual analysis system.

Progress

Task	Current progress	Deadline	Remark
VIS	1. Code for dynamic graph (frontend) 2. Tests of Dyngraph2vec (backend)	10.30	
Graph	Preliminary investigations	10.30	